

## ABSTRACT OF THE DISCLOSURE

A ball screw mechanism comprises a nut, a screw shaft, plural balls and a deflector. The balls are arranged between a first thread groove which is formed on an inner surface of the nut and a second thread groove which is formed on an outer surface of the screw shaft. The deflector comprises a deflector piece which defines a top plate of a ball-return path and a guide member which defines sidewalls of the ball-return path. The ball-return path returns the balls so as to circulate endlessly. As a manufacturing method of the ball screw device, the deflector piece is attached to the nut first. Next, the first thread groove is ground together with an inner surface of the deflector piece. After that, the guide member is attached to the nut. At last, the balls and the screw shaft are assembled to the nut.